

Attorney Docket: 1999DE507
Serial No.: 10/070,071
Art Unit: 1623

Please add the following ABSTRACT

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The invention relates to low-viscous cellulose ethers that flocculate in hot water and have a high degree of purity and whiteness. The invention also relates to a method of producing the same by acidic-catalyzed hydrolytic depolymerization in the presence of an oxidation agent, as well as the use thereof.

Amendments to the Claims

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1. (Currently Amended) A process for the depolymerization of hot water-coagulable cellulose ethers by hydrolytic degradation by means of acids, ~~characterized in that wherein~~ the degradation is carried out at a temperature above the cloud point of the cellulose ether as concentrated aqueous slurry, and ~~in that in addition oxidizing agents are at least one oxidizing agent is~~ added to the concentrated aqueous slurry, before, during and/or after the depolymerization in acidic or neutral medium.
 2. (Currently Amended) The process as claimed in claim 1, ~~characterized in that wherein~~ methyl-, ethyl-, propyl-, hydroxyethylmethyl-, hydroxypropylmethyl-, ethylhydroxyethyl- or ethylmethylcellulose is employed as cellulose ether.
 3. (Currently Amended) The process as claimed in claim 1 or 2, ~~characterized in that wherein~~ the degraded cellulose ether has a Höppler viscosity, measured as 2.0% solution (absolutely dry) in water at 20°C, of ≤ 50 mPas.
 4. (Currently Amended) The process as claimed in ~~at least one of the preceding claims, characterized in that~~ claim 1, wherein mineral acids and/or organic acids are employed as acids.

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5. (Currently Amended) The process as claimed in claim 4, ~~characterized in that~~wherein hydrochloric, sulfuric, nitric and/or phosphoric acids are employed as mineral acids.

6. (Currently Amended) The process as claimed in ~~at least one of the preceding claims, characterized in that~~claim 1, wherein the ratio of water to cellulose ether does not exceed 10:1 by weight.

7. (Currently Amended) The process as claimed in ~~at least one of the preceding claims, characterized in that~~claim 1, wherein peroxy compounds, perborates, sodium chlorite, halogens and/or halogen oxides are employed as the at least one oxidizing ~~agents~~agent.

8. (Currently Amended) The process as claimed in claim 7, ~~characterized in that~~wherein hydrogen peroxide is employed as the at least one oxidizing agent.

9. (Currently Amended) The process as claimed in ~~at least one of the preceding claims, characterized in that~~claim 1, wherein the at least one oxidizing agent is employed in an amount of from 0.01 to 20% by weight based on the cellulose ether.

10. (Currently Amended) The process as claimed in ~~at least one of the preceding claims, characterized in that~~claim 1, wherein after the depolymerization, the degraded cellulose ether is washed with at least one aqueous solution of a basic salt at a temperature above the cloud point of the degraded cellulose ether in order to adjust the aqueous solution of the degraded cellulose ether to a pH in the range from 5.5 to 8.0.

11. (Currently Amended) The process as claimed in claim 10, ~~characterized in that~~wherein sodium carbonate, sodium bicarbonate, sodium sulfate and/or sodium bisulfate is employed as the salt.

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12. (Currently Amended) A methylhydroxypropylcellulose with a Höppler viscosity, measured as 2.0% solution (absolutely dry) in water at 20°C of ≤ 50 mPas, obtainable by a process as claimed in ~~at least one of the preceding claims~~ claim 1.

13. (Currently Amended) A methylhydroxypropylcellulose ~~with~~ with a Höppler viscosity, measured as 2.0% solution (absolutely dry) in water at 20°C, of ≤ 50 mPas, ~~characterized in that it~~ wherein the methylhydroxypropylcellulose has a whiteness, determined by measuring the reflectance in % at 447 nm against a white standard (enamel white standard; reflectance setting = 71.5%), which is above 50%, with a particle size distribution in which the proportion of particles with a size of $< 125 \mu\text{m}$ does not exceed 50%.

14. (Currently Amended) A methylhydroxypropylcellulose as claimed in claim 13, with a Höppler viscosity of from 5 to 50 mPas, ~~characterized in that it~~ wherein the whiteness, determined by measuring the reflectance in % at 447 nm against a white standard (enamel white standard; reflectance setting = 71.5%), is above 60%.

15. (Currently Amended) A methylhydroxypropylcellulose as claimed in claim 13 or 14, ~~characterized in that it~~ wherein the methylhydroxypropylcellulose has a salt content of less than 0.4% by weight.

16. (Currently Amended) A methylhydroxypropylcellulose as claimed in ~~at least one of Claims 13 to 15, characterized in that it~~ claim 13, wherein the methylhydroxypropylcellulose has a content of methoxy groups in the range from 28 to 32% by weight and a content of hydroxypropyl groups in the range from 5 to 9% by weight.

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17. (Currently Amended) A coated composition having a coating, wherein coating comprises the methylhydroxypropylcellulose~~The use of the methylhydroxypropylcelluloses as claimed in at least one of claims 13 to 16 for coating claim 13, and wherein the composition is selected from pharmaceuticals or and seeds and for use in cosmetics, foodstuffs or in suspension polymerization.~~

18. (New) A composition comprising the methylhydroxypropylcellulose as claimed in claim 13, wherein the composition is selected from the group consisting of cosmetics, foodstuffs and suspension polymerization compositions.

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